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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/649,917

08/26/2003

Blaine D. Gaither

10015698-4

5774

7590

07/17/2006

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

P.O. Box 272400

Fort Collins, CO 80527-2400

EXAMINER

BRADLEY, MATTHEW A

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/649,917	GAITHER, BLAINE D.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Matthew Bradley	2187	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,8-10 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action has been issued in response to amendment filed 18 April 2006. Applicant's arguments have been carefully and fully considered in light of the instant amendment, but are considered moot in light of the new ground(s) of rejection not necessitated by amendment. Accordingly, this action has **NOT** been made final.

### ***Claim Status***

Claims 2 and 5-6 are cancelled. Claims 1, 3-4, and 7-10 remain pending and are ready for examination.

### ***Claim Rejections - 35 USC § 112***

The 35 U.S.C. 112 2<sup>nd</sup> rejection set forth in the Office Action dated 24 January 2006 has been withdrawn in light of the instant amendment.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1, 3, and 7** are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma et al (U.S. 6,412,046) hereinafter referred to as Sharma.

As per independent claim **1**, Sharma teach,

- a cache memory that reads and caches a group of lines with a single memory transaction; and (Column 1 lines 18-20)
- a system for maintaining identity of which device, if any, owns the group of lines, and which device, if any, owns each individual line within the group of lines (Column 1 lines 20-25). *The Examiner notes that the system of Sharma allows for the requesting agents that are prefetching to claim ownership of a line. Thus, the system of Sharma maintains which devices currently have ownership of lines that exist within the system.*

As per dependent claim 3, Sharma teach, at least two lines in the group of lines having separate owners (Column 1 lines 18-23). *The Examiner notes that the system of Sharma allows the requesting agent to claim ownership of a cache line that is being prefetched in the group of lines. Thus within that group of lines, the system will have other devices that maintain ownership of the remaining lines in the group.*

As per independent claim 7, Sharma teach,

- retrieving a group of lines in response to a request for a single line; and (Column 1 lines 18-20)
- maintaining ownership information for the group of lines and for each individual line within the group of lines (Column 1 lines 20-25). *The Examiner notes that the system of Sharma allows for the requesting agents that are prefetching to claim ownership of a line. Thus, the system of Sharma maintains which devices currently have ownership of lines that exist within the system.*

***Allowable Subject Matter***

Claims 4 and 8-10 were indicated allowable in the Office Action dated 16 August 2005. In light of the instant amendment, specifically applicant's arguments filed 18 April 2006, they remain allowed at least for the reasons specified in the Office Action noted supra.

***Response to Arguments***

Applicant's arguments have been carefully and fully considered in light of the instant amendment, filed 18 April 2006, but are considered moot in light of the new ground(s) of rejection not necessitated by amendment.

***Conclusion***

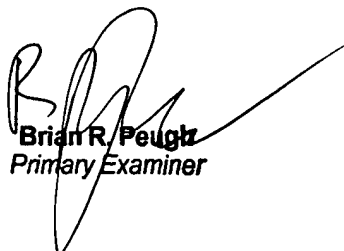
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Bradley whose telephone number is (571) 272-8575. The examiner can normally be reached on 6:30-3:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2187

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRP/mb



**Brian R. Peugh**  
Primary Examiner